JRC Scientific and Technical Reports

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JRC EUROPEAN COMMISSION

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EUR 22309 EN

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JRC 0083111

EUR 22309 EN
ISSN 1018-5593

Luxembourg: Office for Official Publications of the European Communities

Printed in Italy

Cost impact of changing the funding mechanisms for deposit-guarantee schemes in the EU

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This report does not state the official position of the European Commission.

1. Introduction

Directive 94/19/EC on Deposit Guarantee Schemes (DGS) is an important piece of Community legislation. It protects both the wealth of depositors and the stability of the financial system in Member States by preventing a run on banks. The Directive requires EU Member States (MS) to have DGS in place, which protect depositors to a certain extent in cases of default. The Directive leaves many structural aspects of DGS to the discretion of MS, including the way DGS are financed.

As a result, the DGS funding mechanisms are very heterogeneous among MS. Some MS finance their scheme by means of regular contributions (*ex-ante*), whereas others levy contributions only in the event of a crisis (*ex-post*). In between, there are a wide variety of schemes which collect both *ex-ante* contributions and *ex-post* levies.

This study aims at investigating the effects of harmonising the mechanisms for funding DGS across the EU[1] with the aid of a scenario analysis which applies three different *ex-ante* scenarios across the EU MS.

The study is based on data collected from the MS by a survey launched by the European Commission in 2006 in the context of the review of Directive 94/19/EC. In cases where information was missing, unavailable or confidential, the best possible estimates were applied, notwithstanding the possible inaccuracies and inconsistencies that this might cause.

The report is organised as follows: The next section briefly introduces the dataset used to perform the scenario analysis and describes the current situation with DGS in the EU. Section 3 introduces the scenarios and explains the procedure followed to define them. Section 4 presents the results of the scenario analysis. The last section sums up the main conclusions.

[1] DG Joint Research Centre was commissioned to perform this study in 2006 by DG Internal Market for the review of Directive 94/19/EC on deposit-guarantee schemes.
Further details can be found at: *http://ec.europa.eu/internal_market/bank/guarantee/index_en.htm.*

2. The current situation

This section presents some of the data collected by the survey, focusing on the information relevant to the scenario analysis, in particular the amount of deposits and current contributions to DGS in the EU. Note that data on deposits are crucial because in most of the MS they are taken as the basis for calculating the contributions to be collected.

The reference year for the analysis is 2005, which means that the relevant data on deposits are for 2004 (in general, contributions are calculated from the data for the previous year) while the data on contributions are for 2005.

Data were collected on a DGS-by-DGS basis by means of a survey launched in 2006 by the Commission. The questionnaire was prepared by the JRC with the support of the European Forum of Deposit Insurers[2]. Unless otherwise stated, the data collected by this survey are the source for the analysis presented in the sections which follow.

The questionnaire is available at: http://ec.europa.eu/internal_market/bank/guarantee/index_en.htm.

Note that all the MS will be designated by the abbreviations listed in Table 3.

2.1. Data on deposits

Directive 94/19/EC sets a minimum level of protection equal to €20 000 which must be granted in the event of deposits being unavailable. This is known as the "minimum level of coverage". However, the Directive leaves the MS free to choose a level of coverage higher than the minimum of €20 000 and also to introduce *coinsurance*, a percentage of eligible deposits not covered, as provided for in Article 7(4)[3]. Coinsurance reduces the level of protection to the *"payout limit"*: clearly, if no coinsurance is applied, the payout limit equals the minimum level of coverage. The different coverage levels in EU MS on 1 January 2007 are shown in Figure 1. The level of coverage is fundamental to distinguish between different types of deposit, as explained below.

[2] http://www.efdi.net/. The JRC would like to thank the European Forum of Deposit Insurers for its support and useful comments.

[3] Article 7(4) of Directive 94/19/EC:

"Member States may limit the guarantee provided for in paragraph 1 [i.e. €20 000] or that referred to in paragraph 3 [i.e. coverage level defined in their national law and higher than €20 000] to a specified percentage of deposits. The percentage guaranteed must, however, be equal to or exceed 90% of aggregate deposits until the amount to be paid under the guarantee reaches the amount referred to in paragraph 1."

The existing schemes calculate the contributions on the basis of different types of deposit. Some DGS consider the total amount of deposits of their members, minus those excluded from any repayment by virtue of Article 2 of the Directive[4]. In this report, this amount will be referred to as the "*total amount of deposits*."

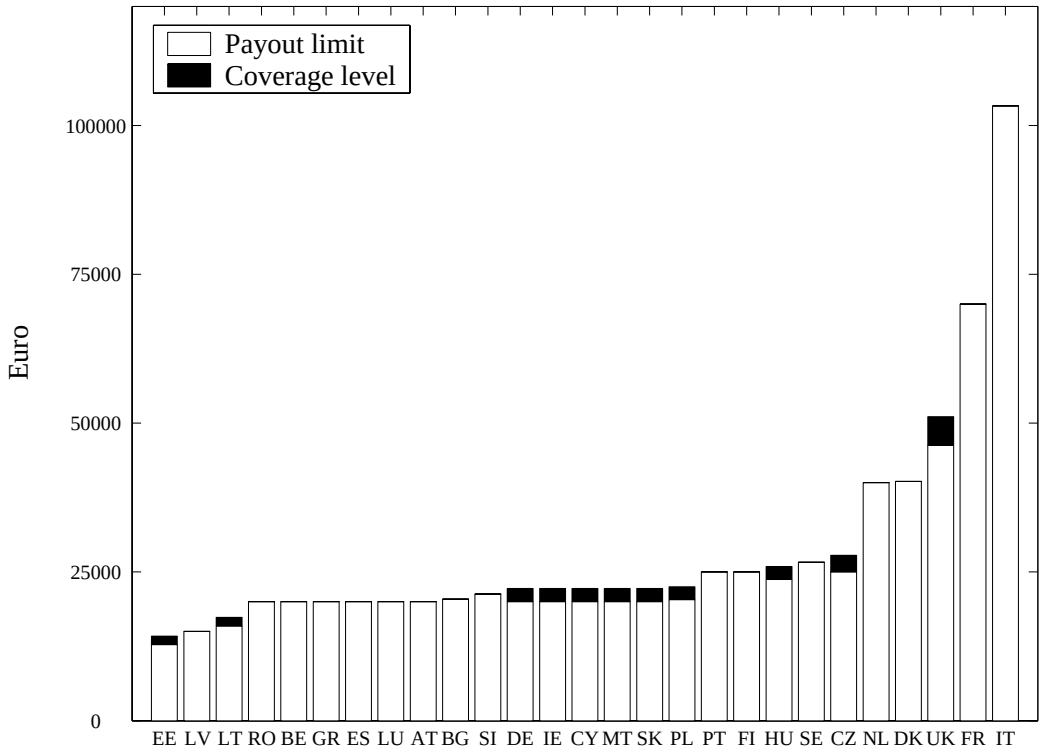

Figure 1: Levels of coverage and payout limits applied in EU MS on 1 January 2007. Note that Member States with a level of coverage lower than €20 000 are in a transition period which will end on 31 December 2007

Since Directive 94/19/EC allows MS to exclude certain classes of deposit from guarantees[5], some MS leave out the categories of deposit excluded from repayment under their national law when setting the premium. In this report the total amount of deposits obtained after these exclusions will be referred to as the *"total amount of eligible deposits."*

[4] Article 2 of Directive 94/19/EC:
"*The following shall be excluded from any repayment by guarantee schemes:*
- *subject to Article 8(3), deposits made by other credit institutions on their own behalf and for their own account,*
- *all instruments which would fall within the definition of 'own funds' in Article 2 of Council Directive 89/299/EEC of 17 April 1989 on the own funds of credit institutions,*
- *deposits arising out of transactions in connection with which there has been a criminal conviction for money laundering as defined in Article 1 of Council Directive 91/308/EEC of 10 June 1991 on prevention of the use of the financial system for the purpose of money laundering.*"

[5] Article 7(2) of Directive 94/19/EC:
"*Member States may provide that certain depositors or deposits shall be excluded from guarantee or shall be granted a lower level of guarantee. Those exclusions are listed in Annex I.*"

Finally, some countries base the premium on the amount obtained by applying the level of coverage in their national legislation to the eligible deposits. In this report, this amount will be referred to as the *"total amount of covered deposits."* Note that the real exposure faced by DGS is the amount of covered deposits (minus coinsurance), since this is the amount of money actually reimbursable.

Each DGS was asked to provide data on the total amount of deposits, total amount of eligible deposits and total amount of covered deposits for the years 2000-2005.

Note that in six MS (DE, ES, IT, CY, AT and PT) more than one DGS are in operation, but their data have been aggregated in order to treat each country as if a single DGS were operating.

The DGS from the new MS provided almost all the data, some from EU-15 supplied no data and others did not report every type of deposit. Inconsistencies with the definitions given in the survey were also observed. Some of these were due to the fact that certain DGS only manage the data used to calculate contributions. In one MS data on aggregate deposits are considered confidential.

In order to complete the database, several estimates had to be included. For instance, for some MS (DE, ES, NL, PL and SI) Eurostat[6] was consulted to estimate the total amount of deposits.

In the case of the total amount of eligible deposits, different approaches were followed:

1) for some MS (DE and NL) Eurostat was consulted to obtain an estimate;
2) for DK and SE approximations of the amounts of eligible deposits were obtained using the ratio of eligible deposits over total deposits in FI (95.05%), as these three MS apply similar exclusions by virtue of Article 7(2) of the Directive;
3) for IE the amount of eligible deposits was estimated using the EU-15 average ratio of the total amount of eligible deposits over the total amount of deposits (62.37%).

Finally, to complete the dataset on the amount of covered deposits, the following procedure was used:

1) Since the amount of covered deposits depends on the level of coverage chosen, the MS for which data were missing were divided into three classes: EU-15 MS with a level of coverage lower than €25 000 (BE, DE, GR, IE and NL), EU-15 MS with a level of coverage higher than €25 000 (FR and UK) and the new MS (HU and PL).
2) For each class the average ratio of the total amount of covered deposits over eligible deposits was calculated using data available on the other MS. The three ratios obtained were 51.82% for EU-15 MS with a level of coverage lower than € 25.000[7], 79.66% for EU-15 MS with a level of coverage higher than €25 000[8] and 52.95% for the new MS.

[6] http://epp.eurostat.ec.europa.eu.

[7] The ratio of the amount of covered deposits to the amount of eligible deposits in Luxembourg was excluded from the average ratio because the Luxembourg ratio is extremely low (15.25%) compared with the others and can be considered an outlier. Note that in this case the highest ratio (58.18%) was not excluded since it is close to the average (51.82%) and the dataset on covered deposits is extremely poor.

[8] This ratio is based only on the two Italian DGS with the highest level of coverage on €103 291.

3) The average ratios obtained were applied to the total amount of eligible deposits to estimate the total amount of covered deposits.

Note that two other countries which could not provide data on covered deposits for 2004 – PT and LT – were treated differently. In fact, one of the two DGS operating in PT provided data on the total amount of covered deposits over eligible deposits, giving a ratio of 52.12%; this figure was used to estimate the amount of covered deposits for the other Portuguese DGS which was unable to provide data on this point. In the case of LT the ratio of the amount of covered deposits to the amount of eligible deposits available for 2005 (51.43%) was applied to the total amount of eligible deposits in 2004.

An overview of the situation throughout the EU is given in Figure 2 and Figure 3; the distributions of deposits (covered, eligible and total) differ in EU-15 countries but are more homogeneous in the new MS.

This report will take the total amount of eligible deposits as the basis for the contributions, since this dataset is the most complete.

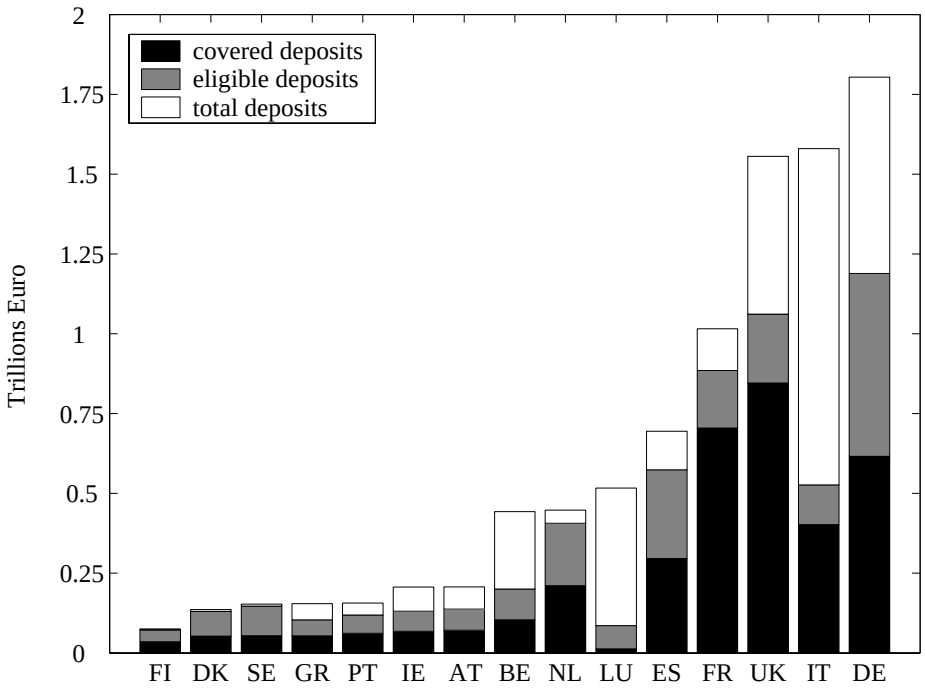

Figure 2: All types of deposits, EU-15

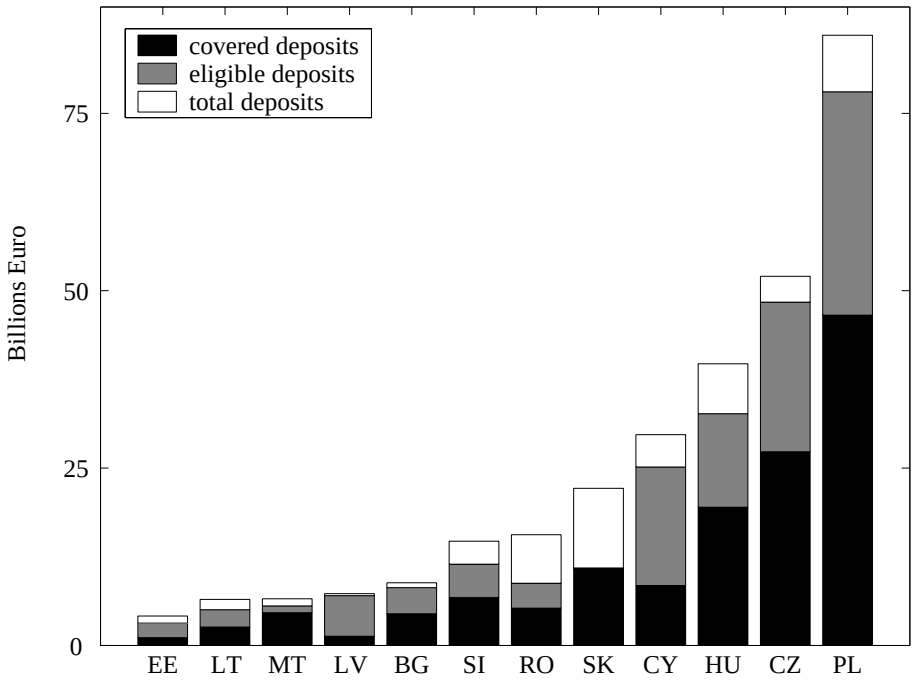

Figure 3: All types of deposits, new MS

2.2. Functioning of the schemes

Directive 94/19/EC leaves MS free to choose the mechanism for funding their DGS. The systems currently applied are very heterogeneous in terms of both type of mechanism (*ex-ante*, *ex-post* or other) and premium definition.

Funding mechanism

Some DGS build up a fund by collecting premiums on a regular basis. At the opposite end, others gather contributions only in the event of default. Between the two, a wide range of intermediate arrangements can be found. The pie chart in Figure 4 classifies the EU funding systems into the categories *"ex-ante", "ex-post"* and "*other*". It refers to the MS and not to the individual DGS since none of the MS with more than one DGS applies different funding systems.

Most of the MS (16) apply an *ex-ante* system in which regular contributions are collected. Classification as an *ex-ante* scheme does not rule out collecting extraordinary contributions in cases where the fund is insufficient to cover the costs. Some *ex-ante* DGS stop collecting contributions once a set target for the fund has been reached. *Ex-post* schemes, with no regular contributions, can be found in six countries (IT, LU, NL, AT, SI and UK).

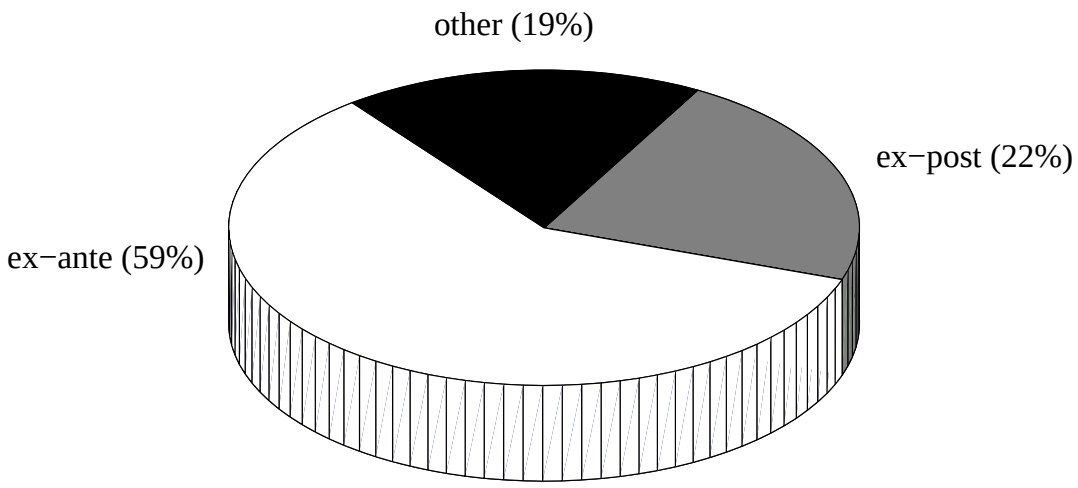

Figure 4: Pie chart of the funding mechanisms in MS

Five DGS (DK, CY, MT, PL and RO) do not meet the requirements to be classified either as *ex-ante* or as *ex-post*. In particular, the Polish scheme can be considered a mixed system: *ex-ante* contributions are levied in advance for an assistance fund and *ex-post* contributions are called in for compensation purposes in the event of default by a member. The system in Denmark can also be considered a mixed scheme since only part of the contribution (at least 25%) is paid into the fund while the rest takes the form of pledges to guarantee payment should the need arise. In Romania the contributions are split into a determined *ex-ante* part plus an *ex-post* part which consists of stand-by lines of credit granted yearly by every member. The Maltese DGS is also a hybrid combining *ex-ante* contributions to keep the fund at the target size with *ex-post* levies collected in case of need. Finally, the regulations governing the Cypriot scheme provide for three different types of contribution: initial (*ex-ante*), supplementary and special (*ex-post*).

Premium definition

In most cases contributions to DGS are set as a percentage of the amount of deposits (total, eligible or covered) held by the members. Half the DGS (19 out of 38) base their premium on the eligible deposits and 26% on the covered deposits; the rest take different approaches (e.g. balance sheet).

For the *ex-ante* DGS, which make no risk-based adjustments and take the eligible deposits as the basis for contributions, the percentages currently applied vary between 0.0175% in BE and 0.50% in BG. Only a few EU-15 MS apply a fixed percentage to the amount of eligible deposits (BE: 0.0175%; GR: 0.0623%; ES: 0.05%). The percentages applied are higher in the new MS, where the average is around 0.29% (this average does not include SK, due to the high fee collected there in order to meet the shortfall in the fund).

Only eight DGS (DE3, FR, IT1, PL, PT1, PT2, FI and SE) take account of risk data of their members when setting the premium. In France a synthetic risk indicator, based on the solvency, diversification and operating profitability of each member, is used to increase or decrease the annual premium within a range of plus or minus 25% of the

standard value. A similar mechanism is applied by one Italian DGS, which classifies members into groups based on an aggregated indicator of risk, solvency, maturity transformation and economic performance. Depending on the group, the contribution is adjusted. The two schemes in Portugal and the one in Finland use a solvency indicator to raise or lower the annual contributions. In Sweden the fee depends on the members' relative capital adequacy ratio: a higher ratio qualifies for a lower fee. One DGS in Germany rates its members into classes based on their last annual financial statement. Once again, this classification results in different adjustments of the annual contribution. In Poland, although the premium is a flat rate, the risk-weighted total balance sheet assets - taken as the basis for the annual premiums - take into consideration the risk posed by the members. Finally, although Hungary's premium is not based on any risk indicator estimated for each member, each individual premium can be increased to up to 150% of the normal fee if a member is involved in risky business (e.g. if it fails to comply with the prescribed minimal capital requirement or if its capital adequacy index falls short of the statutory minimum). A similar procedure is applied in Romania, with a view to introduction of a fully risk-based system.

2.3. Data on the size of the fund

To measure the adequacy of the DGS funds, the following coverage ratio is defined:

$$\text{Coverage ratio} = \frac{\text{Size of the fund (2004)}}{\text{Total amount of eligible deposits (2004)}}.$$

Figure 5 plots the ratios obtained for EU MS. Note that it is not possible to calculate the coverage ratio for Germany for confidentiality reasons. *Ex-post* systems with a fund (IT, LU, NL, AT and SI) are not included in the figure. Although the UK DGS is classified as an *ex-post* system, it also holds a small fund inherited from a previous scheme. This is why the UK is included in this analysis and why its ratio is so low.

The straight black line in Figure 5 marks the average EU coverage ratio (around 0.70%). The average in the EU-15 countries is around 0.52% (0.57% excluding the UK). When the new MS are added, the average rises to 0.89%. The standard deviations in EU-15 and the new MS are 0.38% and 0.84% respectively.

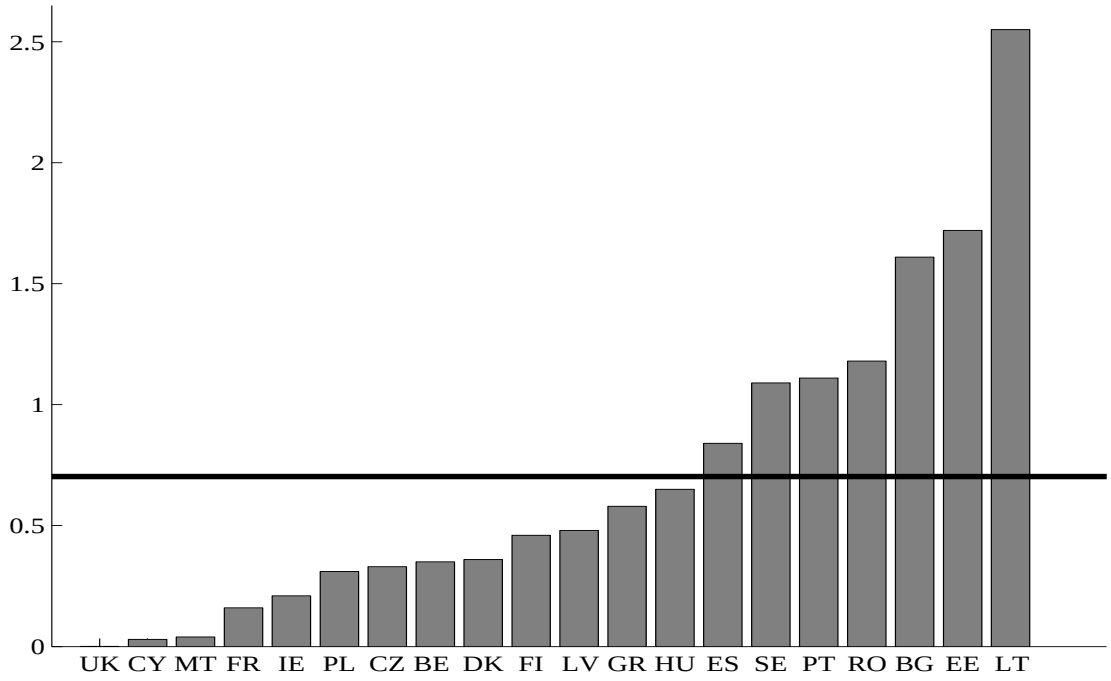

Figure 5: Coverage ratios in the EU MS where a fund is established

3. Scenario analysis

The goal of the scenario analysis is to gain insight into the possible cost implications of harmonising the mechanism for funding DGS. In these scenarios this hypothetical harmonisation was achieved by choosing a funding mechanism currently applied in one MS and imposing it on all the other MS (e.g. applying the same method for premium calculation or the same target coverage ratio). This would lead to different contributions in each MS than those currently levied. By comparing the projected and the 2005 contributions in each MS, the cost implications of harmonising the funding mechanism can be assessed.

3.1 Choice of scenarios

The scenarios were built on the data gathered in order to reproduce existing DGS and not base them on any artificial "model DGS". The choice was restricted by a number of limitations in the dataset, in particular the availability of real data on the amount of covered deposits. Note that the choice of scenarios (like the entire study) in no way prejudges further action by the Commission and is not intended to favour any MS or region.

Three *ex-ante* scenarios were investigated: two representing EU-15 DGS and one representing the new MS. This choice was intended to reflect the different circumstances in the new MS, with their lower level of coverage, smaller amount of deposits, higher number of defaults and, finally, the transition period granted before they have to comply with Directive 94/19/EC.

The coverage ratios indicated in the previous section were taken as the basis for defining the scenarios: MS were classified into the categories shown in Table 1. The right-hand column in the same table shows the relative importance of each class in terms of share of eligible deposits. Scenarios were defined to represent different categories of coverage.

Besides the coverage ratio, premium definition in each DGS was also taken into account for selecting the scenarios to be considered. The premium is always based on a measure of exposure (e.g. amount of eligible deposits or covered deposits). Since the dataset on the amount of eligible deposits is much more complete than the set on covered deposits, only countries which base their premium on the eligible deposits were selected to define the scenarios. This excluded certain MS, such as DK, FI and SE.

The first and second scenarios considered a medium coverage ratio (relative weight of this category: 16.27%): Spain was chosen to represent EU-15 (scenario 1) and Hungary the new MS (scenario 2). In the third scenario a low coverage ratio was applied across the MS (relative weight of this category: 25.61%) and France was chosen to represent this level of coverage.

Table 1: Classification of countries by coverage ratio

Category	Coverage ratio	MS	Share of eligible deposits in EU
High	> 1.5%	BG, EE, LT	0.27%
Medium	0.5%-1.5%	GR, ES, HU, PT, RO, SE	16.27%
Low	0.1%-0.5%	BE, CZ, DK, FR, IE, LV, PL, FI	25.61%
Very low	< 0.1%	CY, MT	0.51%
Ex-post		IT, LU, NL, AT, SI, UK	37.53%
Deficit		SK	0.18%
N.A.		DE	19.64%[9]

Source: Survey data

The next three sections explain how the yearly contributions were set in each scenario. Remember that the reference year for this analysis is 2005, i.e. the 2005 contributions to the DGS were compared with the contributions obtained from the scenarios.

3.2 Scenario 1: Spain, medium coverage ratio

The first scenario was based on Spain to represent an EU-15 MS with a medium coverage ratio of 0.84%. Two different sub-scenarios were considered. In the first the yearly contributions in all EU MS were calculated, starting from the premium set in Spain; in the second a target coverage ratio was applied across EU MS.

a. Scenario 1a. In Spain three DGS are operating to protect depositors in savings banks, private banks and cooperative banks. Three different premiums are collected by these DGS, but they are all calculated on the same basis, namely the amount of eligible deposits plus 5% of the value of securities and financial

instruments. As the value of securities and financial instruments is not available in the dataset, this scenario was based on the amount of eligible deposits only and the premium was set as a percentage of this amount: this exclusion is not expected to influence the results. Savings banks have to apply the smallest percentage (0.04%) and cooperative banks the highest (0.08%), with private banks falling within this range (0.06%). For the scenario analysis these three percentages were combined into a single percentage to be applied to the total amount of eligible deposits in each MS. After weighting on the basis of the total amount of eligible deposits per DGS, this gave a percentage of 0.05%. The annual contributions in this first sub-scenario were therefore set as 0.05% of the total amount of eligible deposits.

b. Scenario 1b. All three Spanish DGS set a target size for their funds of 1% of their basis for contributions (equal to the amount of eligible deposits plus 5% of the value of securities and financial instruments). According to the DGS statutes, once this target size is reached, payment of contributions must be suspended. In this scenario the target size for the fund was set at 1% of the total amount of eligible deposits in each MS. The value of securities and financial instruments is not known and was therefore not considered in this analysis. It was assumed that contributions to build up this target size were collected over a maximum of ten years[10], depending on the size of the fund already accumulated. In subsequent analyses this choice could be corrected to cover a longer or shorter time range. The annual premium was therefore set as 0.1% of the amount of eligible deposits of each MS. Note that this premium is collected only as long as the target for the fund has not been reached. This implies that, depending on the size of the fund in 2004, in some MS no contributions would need to be levied or it would take less than ten years to reach the target level. Finally, as the Slovakian DGS had a shortfall in its fund in 2004 (minus €151 902 336), the annual contributions obtained in this scenario were increased by one tenth of the total deficit. For further details on how the Spanish DGS operates, see its website[11].

3.3 Scenario 2: Hungary, medium coverage ratio

The second scenario was based on the mechanism in operation in Hungary, a new MS with a medium coverage ratio (0.65%). In this scenario, the yearly total annual premium was set at 0.02% of the total amount of eligible deposits of the scheme. This reflects the average percentage applied to the amount of eligible deposits in Hungary in 2005. A fuller description of the Hungarian DGS can be found on the HU DGS website[12].

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[9] For Germany this value is based on the estimates obtained for the amount of eligible deposits.

[10] In order to reach the target size of the fund in a maximum of ten years, contributions should be corrected on a yearly basis to take account of, for example, interventions or changes in the total amount of eligible deposits. These adjustments were not included in this analysis which, for simplicity, compares the 2005 contributions with the contributions obtained for the scenario.

[11] Spanish DGS website: http://www.fgd.es.

[12] Hungarian DGS website: http://www.oba.hu.

3.4 Scenario 3: France, low coverage ratio

The third scenario was based on the French DGS, which is representative of an EU-15 DGS with a low coverage ratio (0.16%). For the French DGS the premium definition depends on risk data, which requires bank-by-bank information. No sufficient data are available for replicating this type of premium in other MS. However, the French DGS sets a target size for the fund of €1 500 000 000, implying a target coverage ratio of 0.17% in 2004. Scenario 3 sets this coverage ratio in every EU-MS, thus giving a different target size for the fund in each MS. In line with the assumptions made for scenario 1b, the premium is collected only if the DGS fund is below the target level and a maximum of ten years is allowed to reach the target size.

As the banking environment might be more stable in some MS than in others, three different sub-scenarios were built in order to take account of differences in the financial systems:

a. Scenario 3a: The first sub-scenario considered a system where banks incur below-average risks. The target coverage ratio of 0.17% was consequently decreased by 25%. This gave a yearly contribution of (0.75)*(0.017%) of the amount of eligible deposits.
b. Scenario 3b: The second sub-scenario considered the French target coverage ratio of 0.17% (average riskiness of banks). This gave a yearly contribution of 0.017% of the amount of eligible deposits.
c. Scenario 3c: The last sub-scenario considered a financial environment where banks incur above-average risks. The target coverage ratio of 0.17% was consequently increased by 25%. This gave a yearly contribution of (1.25)*(0.017%) of the amount of eligible deposits.

A similar technique is applied by the French DGS on a bank-by-bank basis to account for synthetic risk (a score related to capital adequacy and operating profitability). For Slovakia the same correction as in scenario 1b was applied. Note that definition of the scenario on the basis of a target coverage ratio gives no indication of how DGS have to apportion the yearly contributions between their members. The DGS can either include risk data (e.g. capital adequacy ratio or risk-weighted assets), following the example of France, or decide to allocate the total contribution uniformly.

Further information on premium definition in France is available on the French DGS website[13].

[13] French DGS website: http://www.garantiedesdepots.fr.

4. Results

This section presents the results of the analysis obtained by applying the scenarios defined above across EU MS. As explained earlier, the amount of eligible deposits was chosen as the basis for calculating the premium.

Figure 6 and Figure 7 present the results of the scenario analysis comparing the 2005 contributions with the contributions obtained for the scenarios. Figure 6 refers to EU-15 MS and Figure 7 shows the results for the new MS. Since many MS have zero contributions in scenario 3, two separate sets of figures are plotted, one for MS with non-zero contributions in scenario 3 (top), the other showing the results for the remaining MS (bottom). MS were ranked in decreasing order of contributions in scenario 2.

The impact of choosing each of the scenarios is described below. Note that the discussion excludes DE, as the impact of changing the system there cannot be assessed because no data are available on the current premium or current funds.

Table 2 summarises the possible increase in the contributions in each scenario. It also shows the aggregate values per type of funding system and for the EU as a whole. The EU aggregate is also presented as a percentage of the total amount of eligible deposits. This value might help towards understanding whether the EU banking system could afford the impact of harmonising the funding mechanisms.

- Scenario 1b (EU-15, medium coverage ratio) is clearly the scenario with the highest contributions. This reflects the fact that it corresponds to the highest coverage ratio chosen. The 2005 contributions for a few MS (BG, EE, LV, LT, PT, RO, SK and SE) are higher than the contributions in this scenario. In scenario 1a this number of MS increases to BG, EE, GR, ES, IE, LV, LT, RO, SK and FI. The largest increase when comparing the 2005 contributions to *ex-ante* DGS with the contributions in scenario 1 were observed in FR for EU-15 and in CZ and HU amongst the new MS. In these countries the contributions in scenario 1b can be even four to nine times the actual 2005 contributions. In scenario 1a the impact is lower and the contributions for these countries are at most three to four times the actual 2005 contributions.
- In scenario 2 (new MS, medium coverage ratio) around half the MS are presently collecting higher contributions (BE, BG, EE, GR, ES, IE, LV, LT, PL, PT, RO, SK, FI and SE). This scenario mainly influences MS with an *ex-post* funding system. In fact, only three *ex-ante* schemes (CZ, FR and HU) would have to increase their contributions slightly, the total increase being only €30 million for these MS.
- In scenario 3 (EU-15, low coverage ratio) the majority of MS (BE, BG, CZ, DK, EE, GR, ES, IE, LV, LT, HU, PL, PT, RO, SK, FI and SE) would not have to collect any contributions in the first year, as their fund is already sufficiently high. For these DGS future interventions would determine the contributions needed to keep the fund at the target level. Note that scenarios 3a and 3b would have zero impact on *ex-ante* systems.

In general, as expected, the impact would be particularly high on *ex-post* schemes: the total yearly increase for these DGS would range between €0.3 billion (scenario 3a) to €2.3 billion (scenario 1b). The impact on schemes classified as "other" (DK, CY, MT, PL and RO) would be less severe and always at least one order of magnitude lower than the impact on *ex-post* schemes.

The total EU contributions in scenario 1 would be three to four times the actual 2005 contributions, which were around €1 billion; in scenario 2 the total EU contributions would be of the same order of magnitude. One noteworthy point is that the contributions in scenario 3 would be lower than the total EU contributions paid in 2005, due to the fact that many *ex-ante* schemes would not need to collect any contribution.

Considering the entire EU banking system, the impact of harmonising the funding mechanism choosing one of the *ex-ante* scenarios would vary between €0.3 billion (scenario 3a) and €3.8 billion (scenario 1b) (penultimate row in Table 2). Comparing these amounts with the total volume of eligible deposits (last row in Table 2), the relative increment obtained would lie between 0.005% (scenario 3a) and 0.06% (scenario 1b). In order to obtain an exhaustive overview of the global impact, note that the average EU contribution to the *ex-ante* DGS is around 0.15% of the eligible deposits (excluding SK, which has to cope with a deficit).

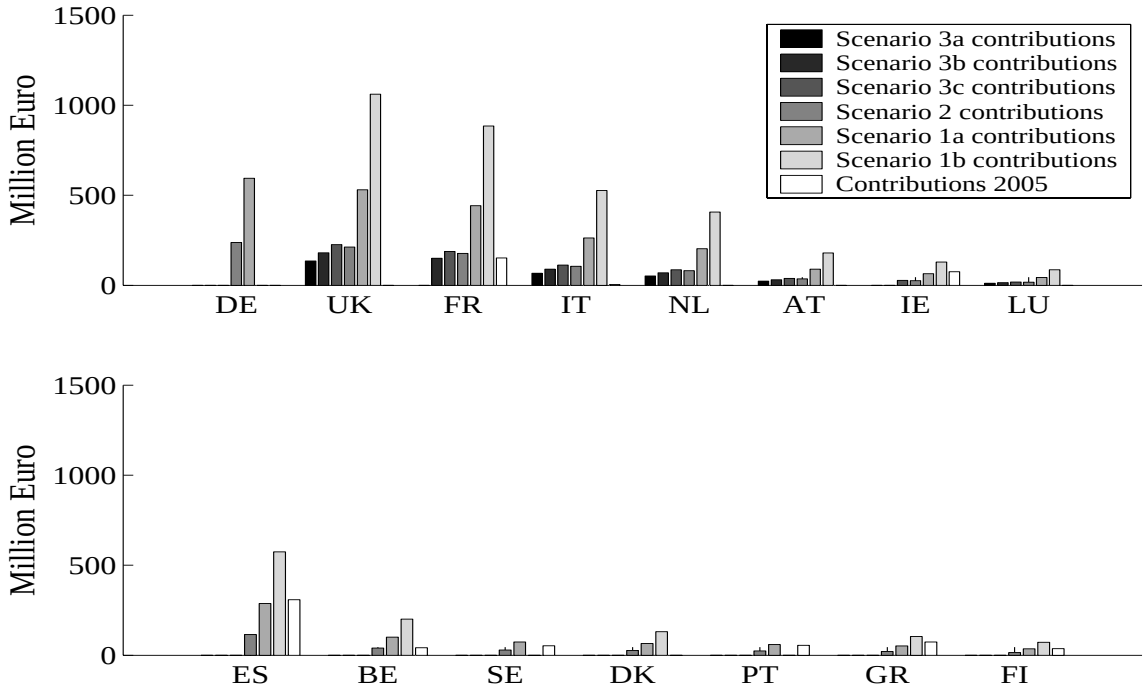

Figure 6: Top panel for EU-15 paying contributions in scenario 3, bottom for MS not paying

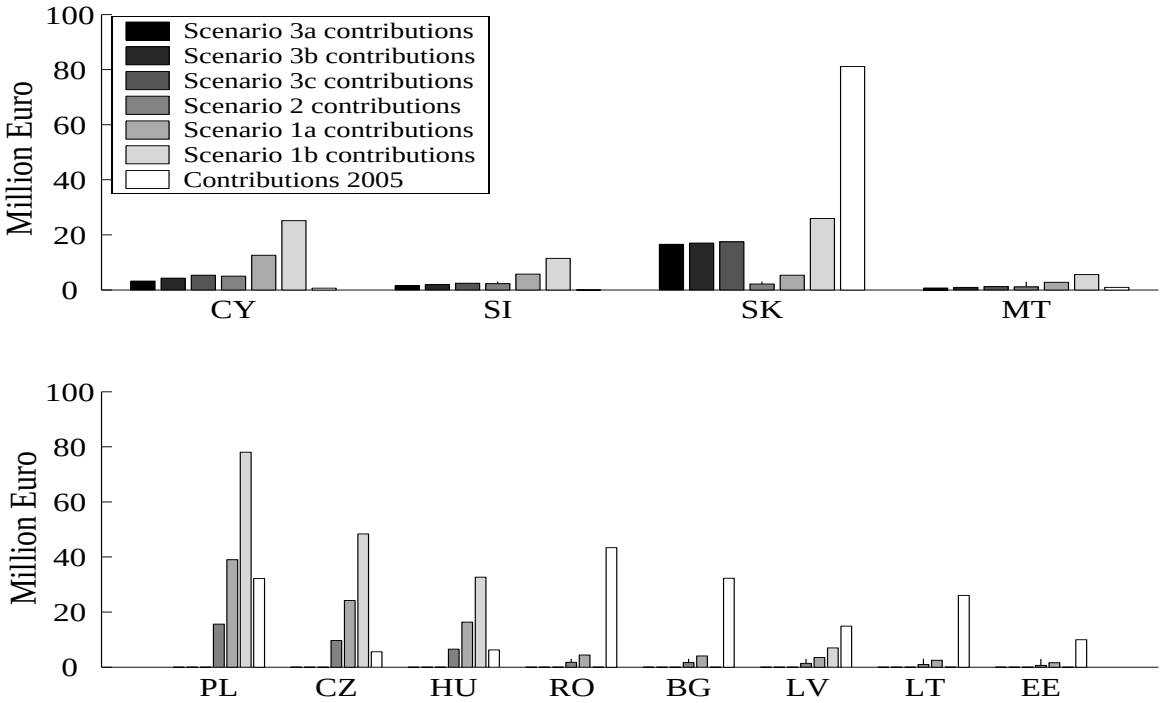

Figure 7: Top panel for new MS paying contributions in scenario 3, bottom for new MS not paying

Table 2: Increase in the contributions to be paid by the MS in each scenario, taking eligible deposits as the basis for the calculations

	Increase in premium in scenario 1: EU-15, medium coverage		Increase in premium in scenario 2: New MS, medium coverage (thousand €)	Increase in premium in scenario 3: EU-15, low coverage (risk-adjusted)		
	Scenario 1a (thousand €)	Scenario 1b (thousand €)		Scenario 3a, low risk (thousand €)	Scenario 3b, medium risk (thousand €)	Scenario 3c, high risk (thousand €)
BE	58 466	158 786	0	0	0	0
BG	0	0	0	0	0	0
CZ	18 594	42 788	4 078	0	0	0
DK	65 303	130 606	26 121	0	0	0
DE	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
EE	0	0	0	0	0	0
GR	0	30 210	0	0	0	0
ES	0	265 865	0	0	0	0
FR	290 405	732 809	24 962	0	0	36 022
IE	0	53 195	0	0	0	0
IT	259 303	522 609	101 320	63 141	85 522	107 903
CY	11 914	24 488	4 369	2 546	3 615	4 684
LV	0	0	0	0	0	0
LT	0	0	0	0	0	0
LU	43 007	86 014	17 203	10 967	14 622	18 278
HU	10 095	26 430	294	0	0	0
MT	1 850	4 633	180	0	13	249
NL	203 254	406 507	81 301	51 830	69 106	86 383
AT	90 000	180 000	36 000	22 950	30 600	38 250
PL	6 833	45 855	0	0	0	0
PT	4 612	0	0	0	0	0
RO	0	0	0	0	0	0
SI	5 725	11 450	2 290	1 460	1 946	2 433
SK	0	0	0	0	0	0
FI	0	35 273	0	0	0	0
SE	21 359	0	0	0	0	0
UK	530 772	1 061 544	212 309	135 347	180 462	225 578
ex-ante	403 530	1 345 357	29 333	0	0	36 022
ex-post	1 132 061	2 268 123	450 423	285 694	382 259	478 825
other	85 900	205 583	30 670	2 546	3 627	4 933
EU	1 621 491	3 819 063	510 426	288 240	385 887	519 779
EU as % of eligible	0.0268%	0.0631%	0.0084%	0.0048%	0.0064%	0.0086%

Source: Survey data

5. Conclusions

This report has investigated, with the aid of a scenario analysis, the possible cost implications of harmonising the mechanisms for funding DGS in the EU. Three different funding systems currently applied in MS were imposed on all the other MS, resulting in different contributions than those actually paid by DGS members. By comparing the projected and actual contributions in each MS, the cost implications of harmonising the funding mechanisms were assessed. All the scenarios are *ex-ante* scenarios, each with different targets for the coverage ratio and different yearly premiums. Two of these scenarios refer to the EU-15 MS, the other to a new MS.

The results highlight that a harmonised funding system representing the EU-15 countries with a medium coverage ratio (0.84%) would raise the contributions in most MS. For some MS the contributions in this scenario could even be four to nine times the current (2005) contributions. Choosing a harmonised system representing the new MS with medium coverage level (0.65%) would mainly affect MS with *ex-post* funding systems. Only a few DGS which have already adopted an *ex-ante* system would have to increase their contributions and the relative difference between the projected and the actual 2005 contributions would almost always be less than 20%. Finally, a scenario with a low coverage ratio (0.17%) would have almost no impact on the current systems applied across MS, since their current coverage ratios are higher than the target ratios. For these DGS future interventions would determine the contributions needed to keep the fund at the target level.

In general, as expected, the impact would be high for *ex-post* DGS, where the total yearly increase in contributions would range between €0.3 billion and €2.3 billion, depending on the scenario.
Considering the EU as a whole, in a scenario with a coverage ratio of 0.84%, the total contributions would be three to four times the total EU contributions in 2005, which were around €1 billion. When considering a coverage ratio of 0.65%, the levies would be of the same order of magnitude as the 2005 contributions, although the breakdown between MS would be significantly different. A scenario with a coverage ratio of 0.16% would imply total EU contributions lower than the 2005 contributions, due to the fact that many *ex-ante* schemes would not need to collect any contribution.

The increase in the EU aggregated contributions if one of the *ex-ante* scenarios were chosen varies between €0.3 billion and €3.8 billion, depending on the scenario. Comparing these amounts with the total volume of eligible deposits, the relative increment lies between 0.005% and 0.06%. Note that the current EU average contribution to *ex-ante* DGS is around 0.15% of the eligible deposits.

One issue not included in this analysis but which might influence the impact of harmonising the way DGS are funded is the effectiveness of the present systems in the event of a cross-border banking crisis. For instance, estimation of the overall costs of such a crisis would show whether the present systems could cope with it and what costs would be encountered if the “standstill” option were chosen. This analysis would suggest the relationship which exists between the coverage ratio and the cost of such a crisis and would assess whether adoption of a specific system is actually worth the price paid for moving away from the current systems. This study would require collection of more detailed data on any defaults which have occurred and, in general, on crises and all types of intervention.

Besides this, further research and data collection should explore the relevance of basing the calculations on covered deposits, which show the actual exposure faced by DGS, instead of eligible deposits. Further research should investigate these (and possibly other) issues.

Table 3: EU Member States

	Country
BE	Belgium
BG	Bulgaria
CZ	Czech Republic
DK	Denmark
DE	Germany
EE	Estonia
GR	Greece
ES	Spain
FR	France
IE	Ireland
IT	Italy
CY	Cyprus
LV	Latvia
LT	Lithuania
LU	Luxembourg
HU	Hungary
MT	Malta
NL	Netherlands
AT	Austria
PL	Poland
PT	Portugal
RO	Romania
SI	Slovenia
SK	Slovakia
FI	Finland
SE	Sweden
UK	United Kingdom

European Commission

EUR 22309 EN **– Joint Research Centre – Institute for the Protection and Security of the Citizen**
Title: Cost impact of changing the funding mechanisms for deposit-guarantee
Author(s): J. Cariboni, A. Uboldi, K. Vanden Branden, F. Campolongo, T. Behnke
Luxembourg: Office for Official Publications of the European Communities
2007 – 20 pp. – 21 x 29.7 cm
EUR – Scientific and Technical Research series – ISSN 1018-5593

Abstract
Directive 94/19/EC on Deposit Guarantee Schemes (DGS) requires EU Member States to have DGS in place, which protect depositors to a certain extent in cases of default. The Directive leaves many structural aspects of DGS to the discretion of MS, including the way DGS are financed. As a result, the DGS funding mechanisms are very heterogeneous among MS. Some MS finance their scheme by means of regular contributions, whereas others levy contributions only in the event of a crisis. In between, there are a wide variety of schemes which collect both ex-ante contributions and ex-post levies. This study aims at investigating the effects of harmonising the mechanisms for funding DGS across the EU with the aid of a scenario analysis which applies three different ex-ante scenarios across the EU MS.

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